



Darknets and Ransomware

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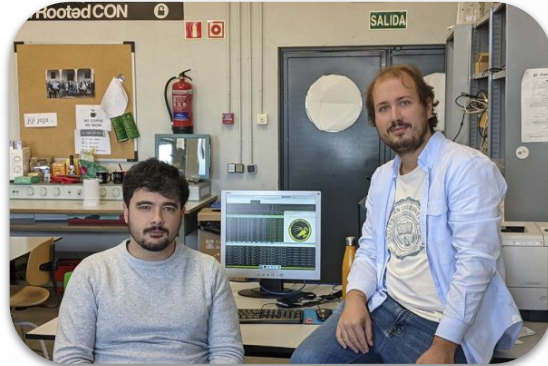
Byron Labs



Information Security Research Lab
Universidad de Alcalá



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LABS**





Ransomware

- Malware specifically designed to encrypt data on a device
- Data on a device is encrypted but the key is not given to the user
- If the user wants the key, he has to pay a ransom
- Usually, this ransom is paid in cryptocurrencies
- **If we do not have backups, we have lost the data**

POLICY \ TECH \ CRYPTOCURRENCY \

US Treasury says ransomware payouts in 2021 could top entire past decade

The top 10 hacker groups are tied to \$5.2 billion in transactions

By [Mitchell Clark](#) | Oct 15, 2021, 6:46pm EDT

Ransomware



Ooops, your files have been encrypted!

English



What Happened to My Computer?

Your important files are encrypted. Many of your documents, photos, videos, databases and other files are no longer accessible because they have been encrypted. Maybe you are busy looking for a way to recover your files, but do not waste your time. Nobody can recover your files without our decryption service.

Can I Recover My Files?

Sure. We guarantee that you can recover all your files safely and easily. But you have not so enough time. You can decrypt some of your files for free. Try now by clicking <Decrypt>. But if you want to decrypt all your files, you need to pay. You only have 3 days to submit the payment. After that the price will be doubled. Also, if you don't pay in 7 days, you won't be able to recover your files forever. We will have free events for users who are so poor that they couldn't pay in 6 months.

How Do I Pay?

Payment is accepted in Bitcoin only. For more information, click <About bitcoin>. Please check the current price of Bitcoin and buy some bitcoins. For more information, click <How to buy bitcoins>. And send the correct amount to the address specified in this window. After your payment, click <Check Payment>. Best time to check: 9:00am - 11:00am GMT from Monday to Friday.

Send \$300 worth of bitcoin to this address:

12t9YDPgwueZ9NyMgw519p7AA8isjr6SMw

About bitcoin
How to buy bitcoins?

Payment will be raised on
5/16/2017 00:47:55

Time Left
02:23:57:37

Your files will be lost on
5/20/2017 00:47:55

Time Left
06:23:57:37

readme.txt - Bloc-notes

Fichier Edition Format Affichage ?

All of your files are currently encrypted by CONTI ransomware. If you try to use any additional recovery software - the files might be damaged or lost.

To make sure that we REALLY CAN recover data - we offer you to decrypt samples.

You can contact us for further instructions through:
Our email
niggchiphoter1974@protonmail.com

Our website
TOR VERSION :
(you should download and install TOR browser first <https://torproject.org>)
<http://m232fdxbfmrcehbrj5iayknxnggf6niqfj6x4iedrgtab4qupzj1aid.onion>
HTTPS VERSION :
<https://contirecovery.best>

YOU SHOULD BE AWARE!
Just in case, if you try to ignore us. we've downloaded your data and are ready to publish it on our news website if you do not respond. So it will be better for both sides if you contact us ASAP

---BEGIN ID---
hauOPaqUZL8kH4Vw9Qph2r40fLnAavX1Se2tGYNKcp0BjNP4rxfcvgiyoJfzehMo
---END ID---

Ransomware



NEWS

Spora Ransomware Provides 24/7 Customer Support To Victims!



By Harsh — On Feb 7, 2017

4 WTF is this?? and what is Bitcoin???

Could you check video on Instruction field?



A I got hit with this virus on the 3rd, now today it looks like the files changed. Are you also stopper@india.com, or is that a second ransomware?

We are only Spora Ransomware, no other ransomsares we can help



Gifted free decode for 798182B07B5530. Please, make a review (with screenshots, payment details, decryption process) on site: <http://bit.ly/2ky4Eb2>

And few others that you will find. Please, make a truthful review as it was. Thank you

7 ok, now i will make some screenshots for proofs. And copy link to site. Thanks.



E Both of my computers have been infected by this. I was able to piece together the price for the first one in bitcoins but my other computer just showed up as being infected too. I will pay the full restore fee, but I dont think I could get the bitcoins in only 3 days, especially starting from scratch.

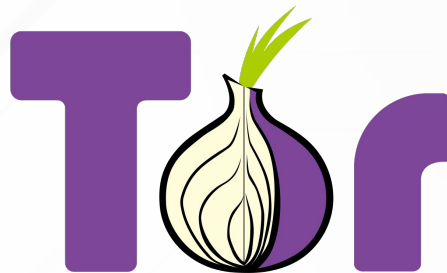
No problem. We disabled deadline for you. Pay asap, please. After this, left a review on <http://bit.ly/2ky4Eb2> and we will send you back some bitcoins





Evolution of the modus operandi

- Changes in modes of extortion information theft
- Now several ransomware groups steal the information of companies
- Encrypt and threat to publish this information





Evolution of the modus operandi

- Use of darknets to publish stolen information
- Contact with “clients” through Tor hidden services

The screenshot displays a darknet marketplace interface with the following details:

- LOCKBIT 3.0** logo in the top left.
- LEAKED DATA** banner in the top right.
- Four data listings arranged in a 2x2 grid:

Domain	Time	Price	Description	Updated	Views
axelcium.com	11D 13h 09m 28s	\$ 40000	AXELCIUM is a Consulting Firm specialised in Transaction Advisory Services, Financial Engineering & Regulation in the Infrastructure Industry (PPP/PFI) project	05 Jul, 2022, 07:20 UTC	1034
slpcolombus.com	11D 13h 07m 46s	\$ 288232	Created by accomplished entrepreneurs with more than 20 years of experience in real estate, the SLP COLOMBUS REIM aims to reposition obsolete tertiary assets in Paris and	05 Jul, 2022, 07:18 UTC	867
lesbureauxdelepargne.com	11D 12h 57m 43s	\$ 187629	Les Bureaux de l'pargne is a family-owned and independent brokerage firm, chaired by Constance COILLARD. For more than 30 years, we have been accompanying our	05 Jul, 2022, 07:19 UTC	796
faacgroup.com	11D 12h 52m 57s	\$ 387343	Fabbrica Automatismi Apertura Cancelli (FAAC) was founded in 1965 and immediately became synonymous with automation for gates all around the world. Quality, safety,	05 Jul, 2022, 07:20 UTC	863



Evolution of the modus operandi

- Changes in modes of extortion information theft
- Now several ransomware groups steal the information of companies
- Encrypt and threat to publish this information



Analysis

- We monitored and download data from 31 ransomware groups in 2021
 - Now we analysing 2022 to data

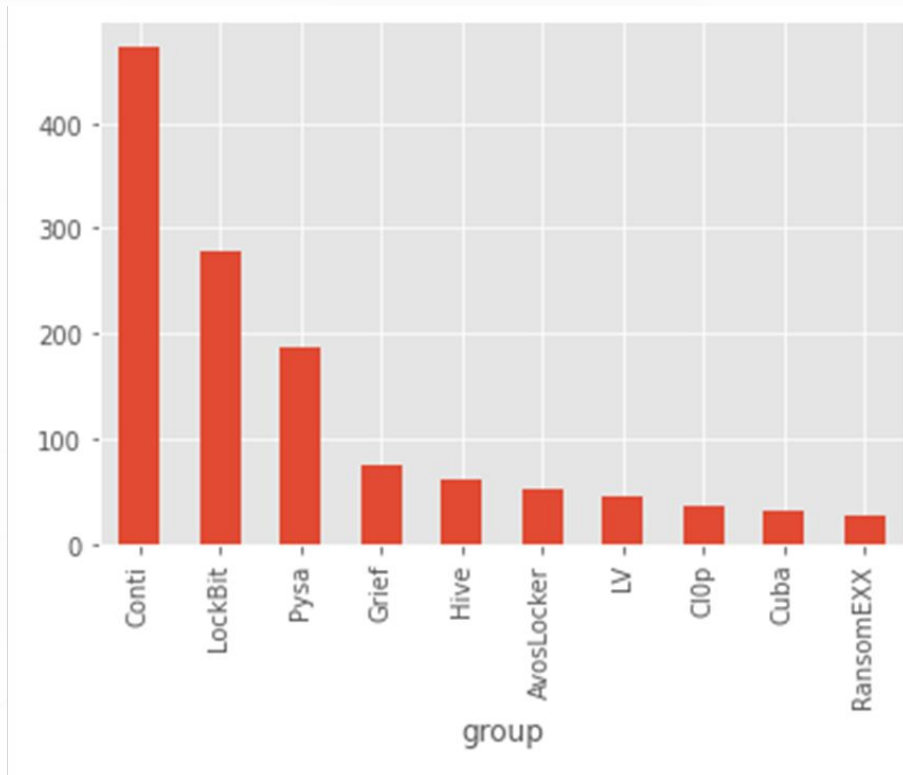
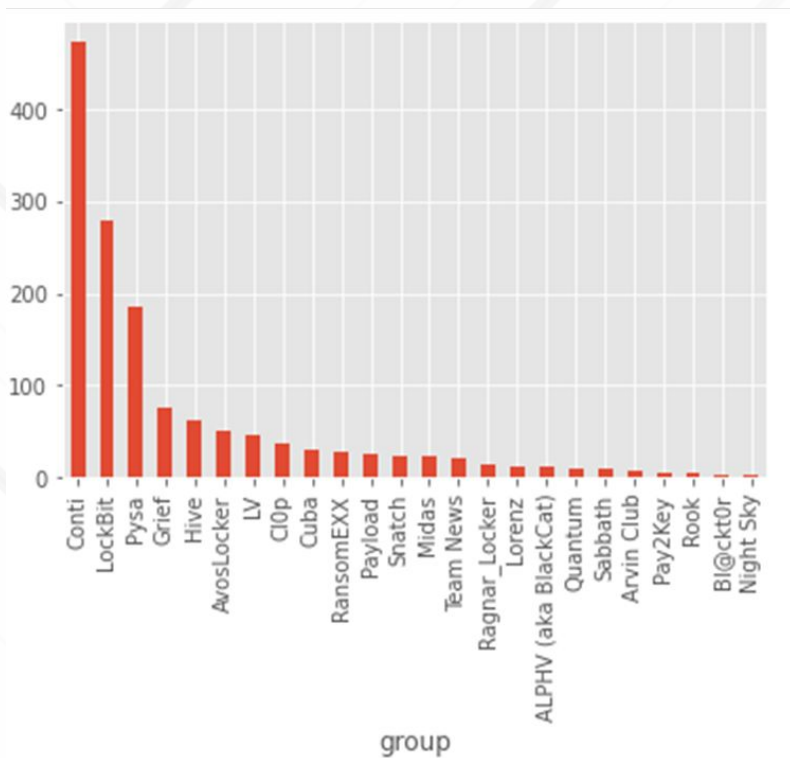




31 monitored groups in 2021

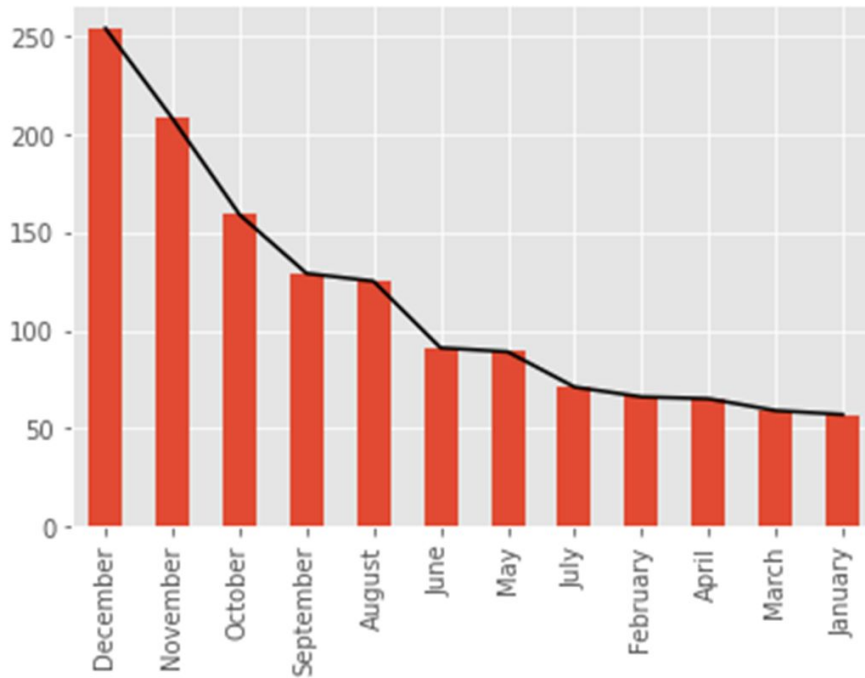


Most active groups



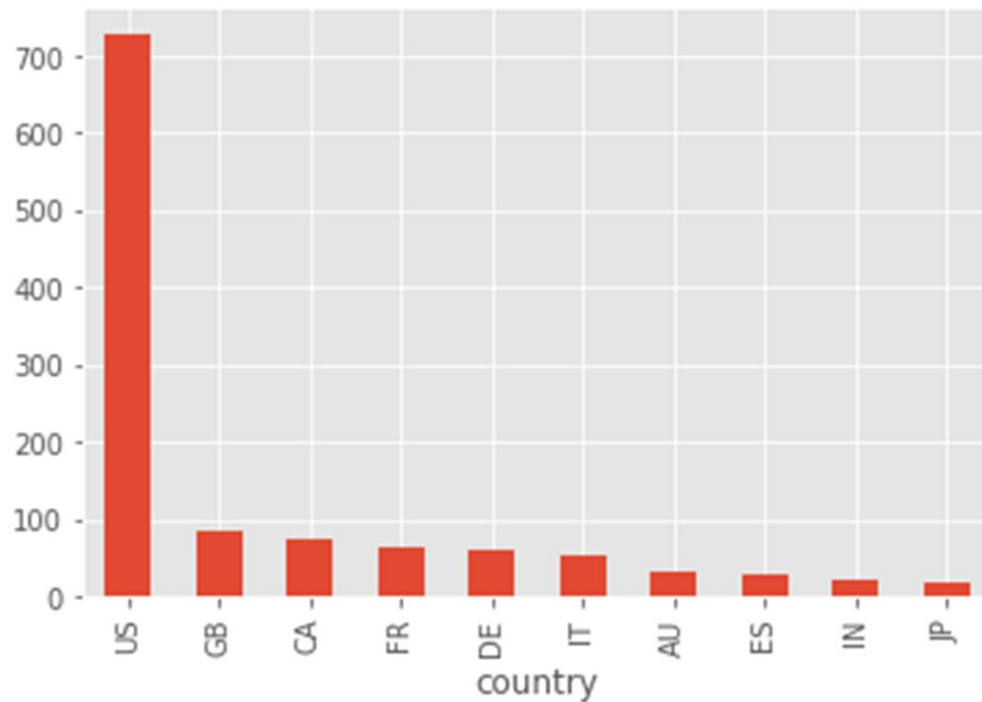


Increase on the number of attacks



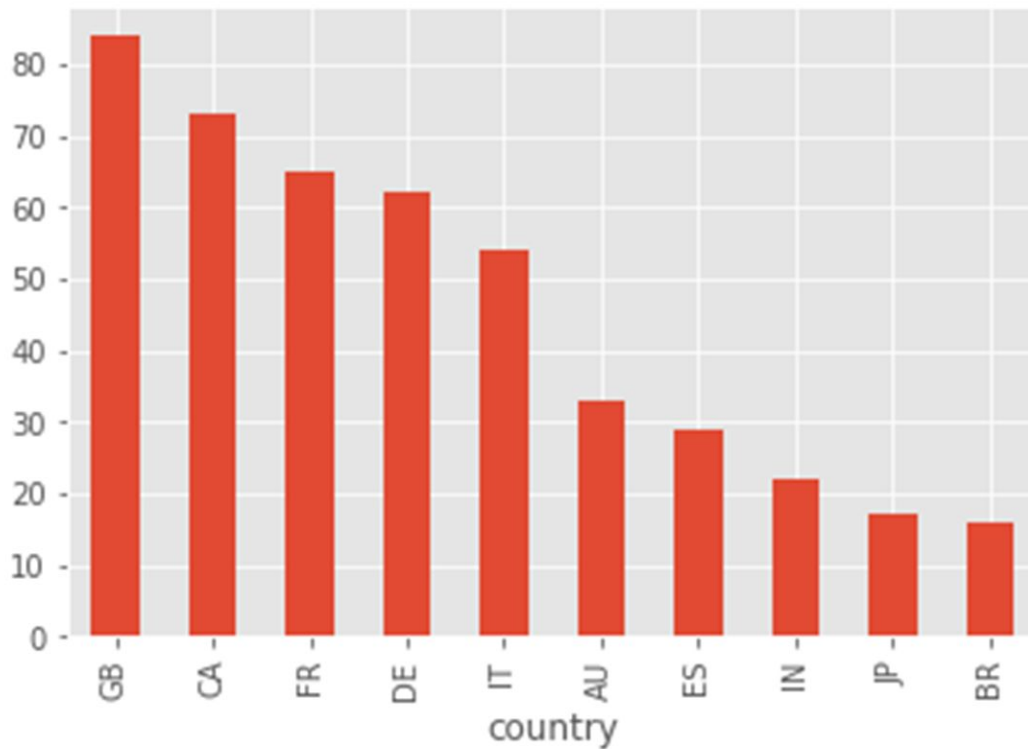


Top 10 affected countries in 2021





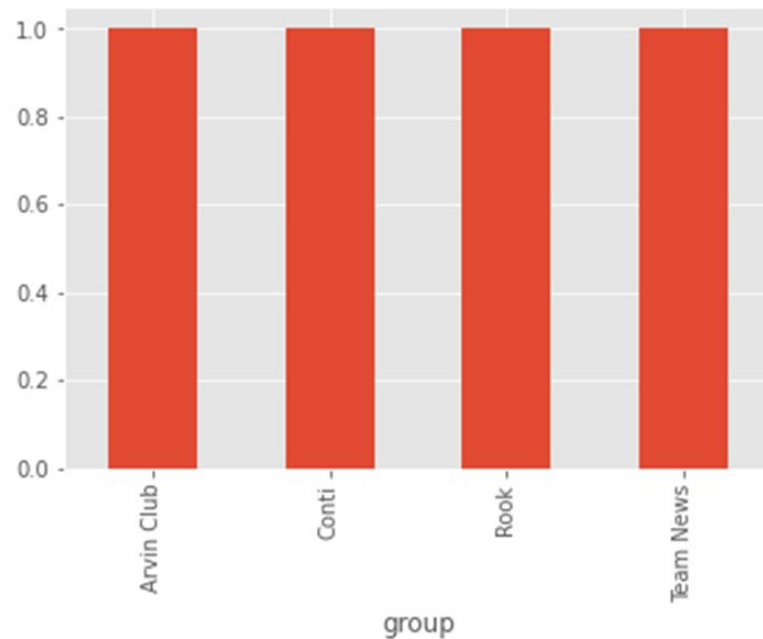
Top 10 affected countries in 2021 – Outside US





Russian Speaking Countries

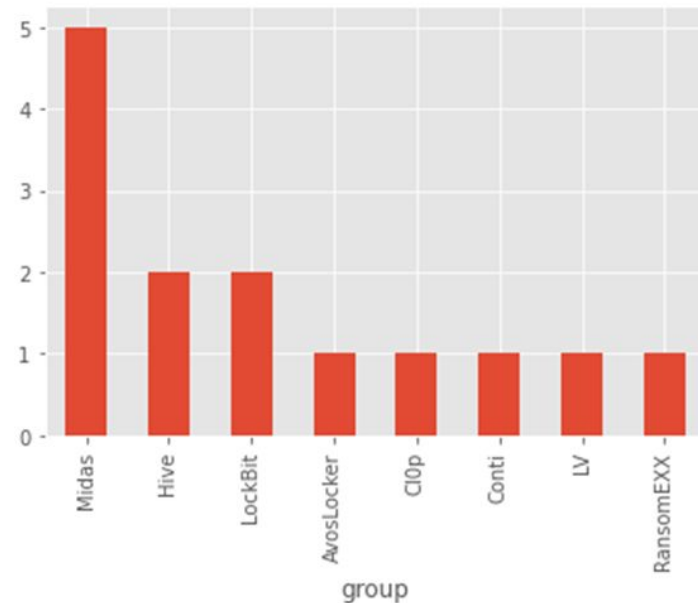
company_link	country	sector	group
https://www.kontron.com/en	GE	Information Technology	Conti
http://www.tis-spb.com/	RU	Transportation	Team News
https://www.utair.ru/	RU	Transportation	Arvin Club
https://hcsbk.kz/	KZ	Financial institutions	Rook



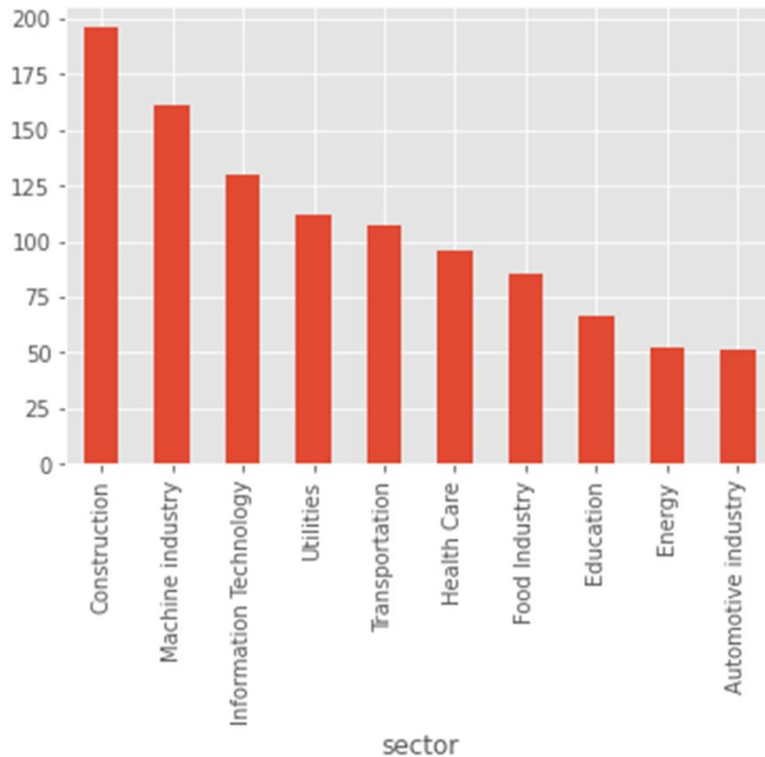
China



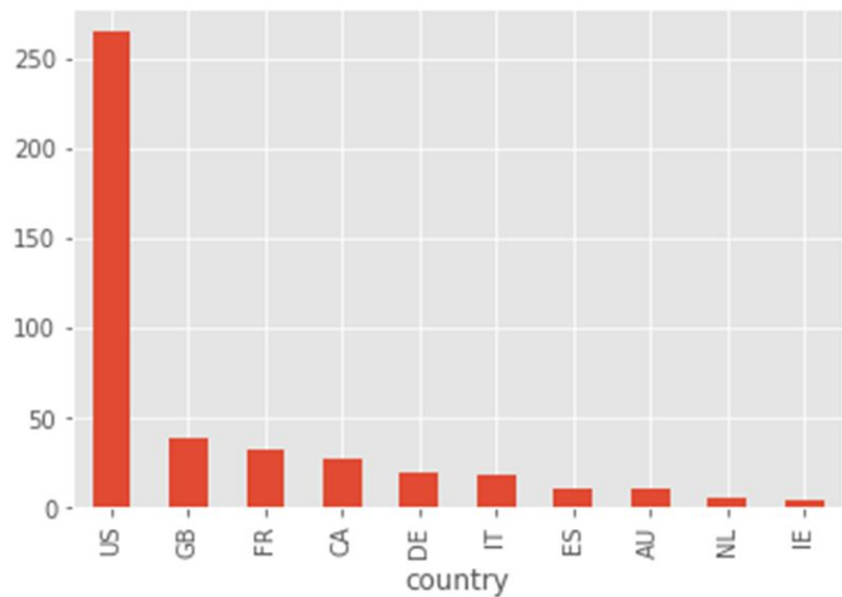
company_link	sector	link	group
http://51talk.com	Education	http://lockbitapt6vx57t3eeqjof	LockBit
http://isoftstone.com	Information Technology	http://lockbitapt6vx57t3eeqjof	LockBit
http://www.armchina.com/	Information Technology	http://continewsnv5otx5kaoje7	Conti
http://www.dechang-motor.com	Machine industry	http://hiveleakdbtnp76ulyhi52e	Hive
http://www.huali-group.com	Utilities	http://avosqxh72b5ia23dl5fgwc	AvosLocker
http://www.shac.com.cn	Automotive industry	http://hiveleakdbtnp76ulyhi52e	Hive
http://www.weichai.com	Machine industry	http://rbvuetuneohce3ouxjlbxt	LV
https://www.walsin.com/	Information Technology	http://rns777cdsjrslbs4v5qoi	RansomEXX
http://en.epower88.cn/	Energy	http://midasbkic5eyfox4dhnijk	Midas
http://mmoser.com	Construction	http://santat7kpllt6iyvqbr7q4ar	ClOp
http://www.niell.cn	Energy	http://midasbkic5eyfox4dhnijk	Midas
http://www.shanghai-electric.com	Information Technology	http://midasbkic5eyfox4dhnijk	Midas
http://www1.gewcorp.com/	Energy	http://midasbkic5eyfox4dhnijk	Midas
https://us.imr.cc/companyprofi	Construction	http://midasbkic5eyfox4dhnijk	Midas



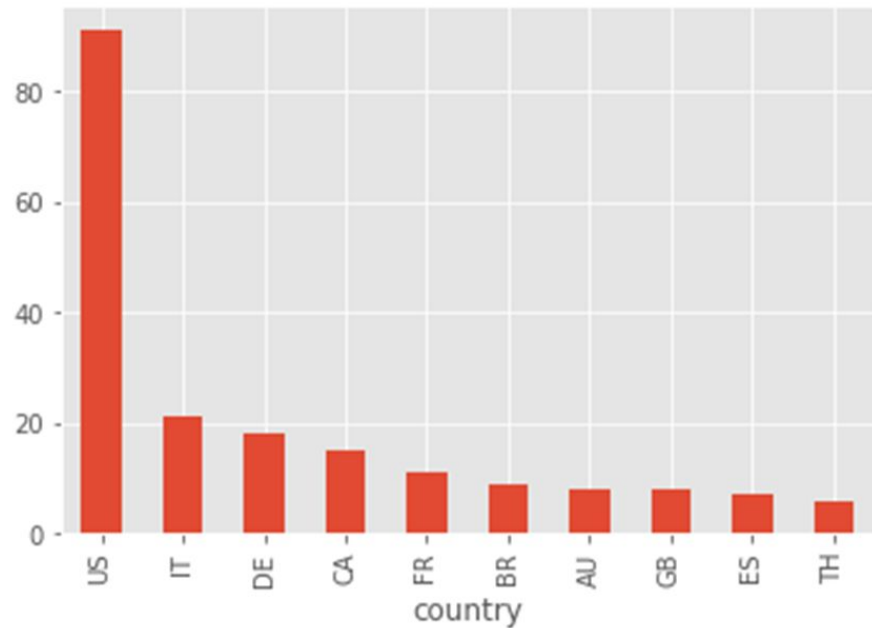
Top 10 affected sectors in 2021



Conti vs LockBit 2.0

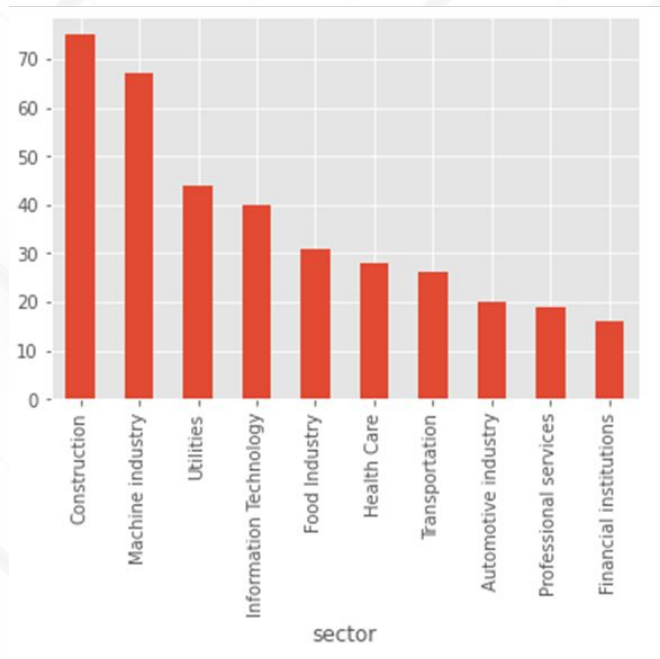


CONTI

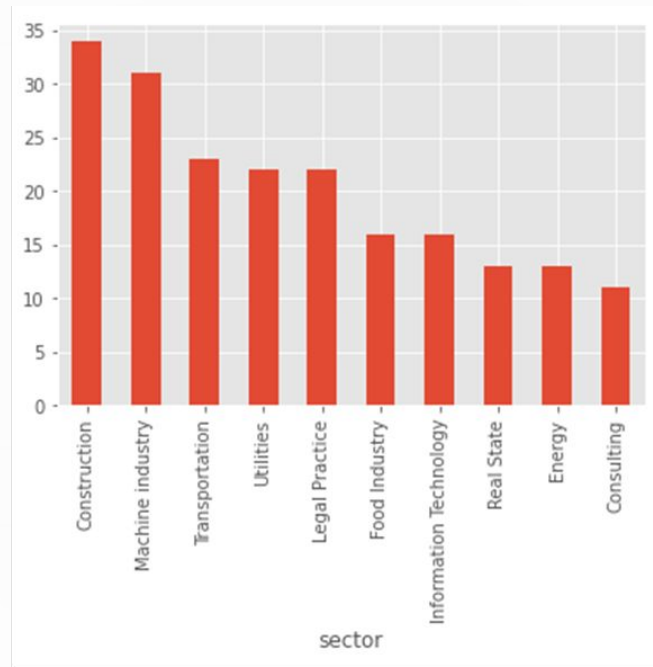


LockBit 2.0

Conti vs LockBit 2.0

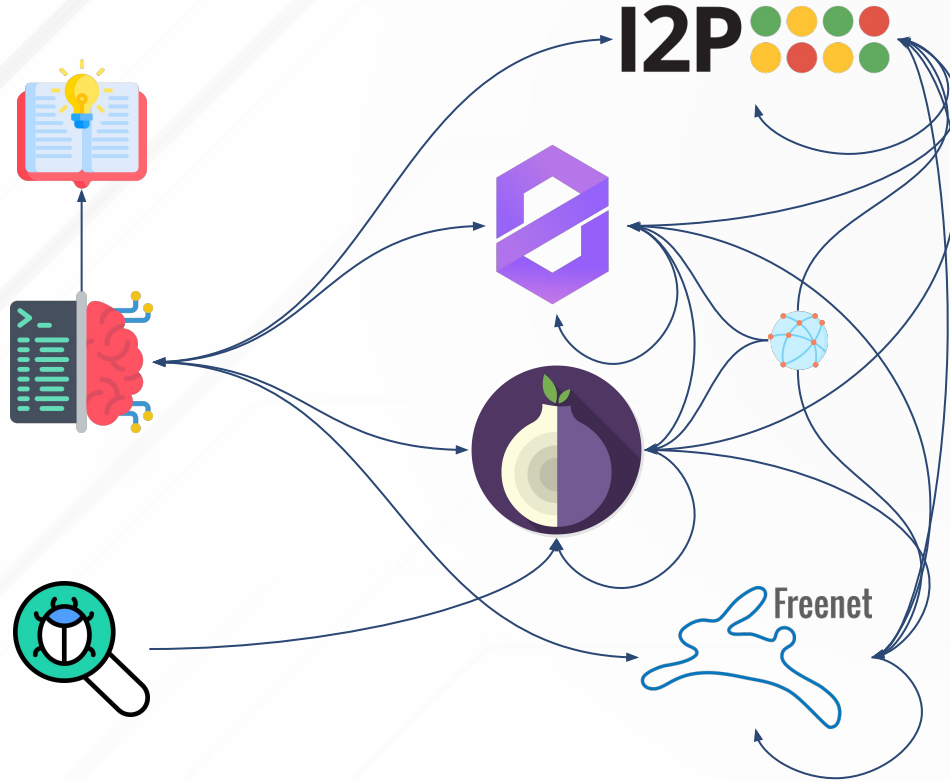


CONTI

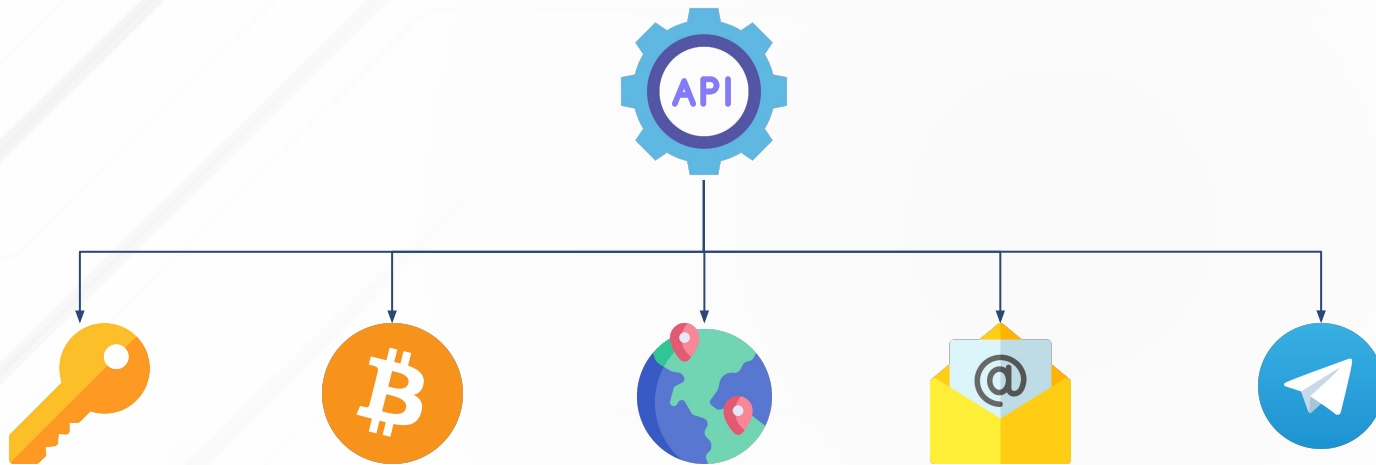


LockBit 2.0

Vysion



Product - Vysion



<https://developers.vysion.ai/>

Enrichment Results



Below you can see the attributes and objects that are to be created from the results of the enrichment module.

Event ID	1275
Event UUID	540a3112-0115-460a-a73a-26c4542c571c
Event creator org	Testing org
# of resolved Attributes	51 (10 objects)

Import	Category	Type	Value	Tags	IDS	Disable Correlation	Comment	Distribution
<div style="background-color: #1a3d4d; color: white; padding: 5px;"> ✓ Name: vysion-page 🔗 References: 0 </div>								
<input checked="" type="checkbox"/>	Other	id text	62a2de29f4b28eceb98eb71f		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Network activity	url url	http://7fzrei37r2lkjnyqvra5br4n6dk4a5gfyggfp7ydsugmzkk67apid.onion:80/bank-accounts.html		<input checked="" type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Other	network text	tor		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<div style="background-color: #1a3d4d; color: white; padding: 5px;"> ✓ Name: vysion-page 🔗 References: 0 </div>								
<input checked="" type="checkbox"/>	Other	id text	615483c0b8968e7d85c9b96e		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Network activity	url url	http://23uud7qmaq2nu7kvwvwyzqnfurqjrcr26n45afhpwf5qf26drg2vid.onion:80/bank_accounts		<input checked="" type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Other	network text	tor		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<div style="background-color: #1a3d4d; color: white; padding: 5px;"> ✓ Name: vysion-page 🔗 References: 0 </div>								
<input checked="" type="checkbox"/>	Other	id text	616a38e9a72a8244a7a8b3c6		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Network activity	url url	http://xrlvebokxn22g6x5gmq3cp7rsv3ar5zpirzyqlc4kshwfpnpl2zucdqd.onion:80/node/147712/index.html		<input checked="" type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Other	network text	tor		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<div style="background-color: #1a3d4d; color: white; padding: 5px;"> ✓ Name: vysion-page 🔗 References: 0 </div>								
<input checked="" type="checkbox"/>	Other	id text	619ae8f236275b24ea61dfc		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Network activity	url url	http://xrlvebokxn22g6x5gmq3cp7rsv3ar5zpirzyqlc4kshwfpnpl2zucdqd.onion:80/node/147713/index.html		<input checked="" type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event
<input checked="" type="checkbox"/>	Other	network text	tor		<input type="checkbox"/>	<input type="checkbox"/>	banco santander: Enriched via th	Inherit event

Ransomware Feed

```
1  {
2  "data": {
3    "total": 5,
4    "hits": [
5      {
6        "id": "690026f1a0b539c23bd51d9e10752fd0fa8ccb399371578b9e73bf068cbc1f7d",
7        "company": "PT Astra Honda Motor",
8        "company_link": "http://www.astra-honda.com/",
9        "link": "http://ecdmr42a34qovoph557zotkfvth4fsz56twvwgiylstjup4r5bpc4oad.onion/JhykowedsgX/UdfGe4kmvb81sp/",
10       "group": "Vice Society",
11       "date": "2022-06-27T14:17:32",
12       "info": " Indonesia PT Astra Honda Motor is a motorcycle manufacturer based in Jakarta, Indonesia. It is a
13         joint venture between Honda and Astra International. "
14     },
15     {
16       "id": "b2df58acf21cc6abb423857d5c19bc265797be6c4aa1075d079e9dfc9eff8a36",
17       "company": "Pilton Community College",
18       "company_link": "http://www.piltoncollege.org.uk/",
19       "link": "http://ecdmr42a34qovoph557zotkfvth4fsz56twvwgiylstjup4r5bpc4oad.onion/JhykowedsgX/dsw64P0Gk1t8Xx/",
20       "group": "Vice Society",
21       "date": "2022-06-27T14:17:32",
22       "info": " United Kingdom Pilton Community College is a coeducational secondary school with academy status,
23         located in the Pilton area of Barnstaple in the English county of Devon. "
```

Questions?

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`/in/carlos-cilleruelo/` | `/in/junquera`